longitude of Paris-Greenwich in parallel with a determination by Dyson and Hollis. On the introduction of the wireless dissemination of time by General Ferrié from the Eiffel Tower a letter from M. Bigourdan to the Astronomer Royal pointed out the desirability of receiving the signals at Greenwich. The Bureau de l'heure was established at Paris in 1912, and in 1919 was brought into relationship with the Astronomical and Geodetic Unions. M. Bigourdan became Director, and remained in that capacity till 1928.

M. Bigourdan married a daughter of Admiral Mouchez, Director of the Paris Observatory, who survives him.

M. Bigourdan had many astronomical friends in England, who had the pleasure of meeting him at numerous conferences in Paris and at the meetings of the International Astronomical Union.

F. W. D.

## Gustave Ferrié.

GENERAL GUSTAVE FERRIÉ died on Feb. 16 at the age of 63. He was a pioneer in wireless telegraphy. In 1808 he was present when Marconi made experiments in wireless between Wimereux and Dover. In 1900 he commenced to create the French Military Radio-telegraphic Service. It is not necessary to chronicle here his technical discoveries and achievements. Astronomers and geodesists are under the greatest obligation to him for the distribution of accurate time. The installation of the Eiffel Tower time-service was in 1910. In 1912 and 1913 an international service was inaugurated, with headquarters at Paris. The first long arc of longitude by wireless was carried out between Paris and Washington from 1913 Oct.-1914 Feb. After the War the Bordeaux service was started. Schemes for the determination of the longitudes of a number of the principal observatories were brought forward by General Ferrié and carried out in October and November 1926, and a proposal for a re-determination in 1933 has been set on foot by him.

General Ferrié attended a number of Astronomical and Geodetic Congresses, generally as Chairman of the Commission on Longitudes. He was a most courteous chairman and very friendly colleague. F. W. D.